1634

In re the application of Markus Pompejus, et al.
Serial No. 09/602,839
Filed: June 23, 2000
For: *Corynebacterium Glutamicum* Genes Encoding Proteins Involved in Genetic Stability, Gene Expression, and Protein Secretion and Folding

Docket No. BGI-127CP

COMMISSIONER FOR PATENTS
Washington, D.C. 20231

Sir:

Transmitted herewith for filing in connection with the above-identified application are the following:

- ☒ Preliminary Amendment and Response to Restriction Requirement (16 pages, including Version with Markings to Show Changes Made and Appendix A);
- ☒ Request for Five-Month Extension of Time (1 pagem in duplicate);
- ☒ Associate Power of Attorney (1 page); and
- ☒ Return Postcard

The fee has been calculated as shown below:

	(Col. 1)		(Col. 2)	(Col. 3)
	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NO. PREVIOUSLY PAID FOR	PRESENT EXTRA
TOTAL	* 27	MINUS	** 52	= 0
INDEP.	* 10	MINUS	*** 15	= 0
☐ FIRST PRESENTATION OF MULTIPLE DEP. CLAIM				

SMALL ENTITY			OTHER THAN A SMALL ENTITY	
RATE	ADDIT. FEE	OR	RATE	ADDIT. FEE
x 9 =	$.00		x 18 =	$0.00
x 42 =	$.00		x 84 =	$0.00
+140 =	$.00		+ 280 =	$.00
TOTAL ADDIT. FEE	$0.00	OR	TOTAL	$0.00

* If the entry in Col 1 is less than the entry in Col. 2, write "0" in Col. 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, write "20" in this space.
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, write "3" in this space.

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed.

- ☒ The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 12-0080. A duplicate copy of this sheet is enclosed.
  - ☒ Any filing fees under 37 CFR 1.16 for the presentation of extra claims.
  - ☐ Any patent application processing fees under 37 CFR 1.17.
- ☒ Please charge any additional fees or credit any overpayments associated with this communication to our Deposit Account No. 12-0080. A duplicate copy of this sheet is enclosed. Applicants request any extensions of time necessary to respond.

I hereby certify that this transmittal letter and the papers referred to as being enclosed therein are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on:

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Lisa M. DiRocco
Signature of Person Mailing

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Markus Pompejus *et al.*

Serial No.: 09/602,839

Filed: June 23, 2000

For: *Corynebacterium Glutamicum* Genes Encoding Proteins Involved in Genetic Stability, Gene Expression, and Protein Secretion and Folding

Attorney Docket No.: BGI-127CP

Group Art Unit: 1634

Examiner: Lu, Frank Wei Min

Commissioner for Patents
Washington, D.C. 20231

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November 15, 2002
Date of Signature and of Mail Deposit

By: Lisa M. DiRocco
Lisa M. DiRocco, Esq.
Reg. No. 51,619
Attorney for Applicants

PRELIMINARY AMENDMENT AND RESPONSE TO RESTRICTION REQUIREMENT

Dear Sir:

This paper is in response to an Office communication mailed May 15, 2002 (Paper No. 9). A separate petition for the appropriate extension of time in which to respond is being filed concurrently herewith. Prior to examination of the above-identified application, please amend the application as follows:

In the claims:

Please cancel claims 18-35, without prejudice and add claim 39 as follows:

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39. **(New)** An isolated nucleic acid molecule selected from the group consisting of:

(a) a nucleic acid molecule comprising the nucleotide sequence set forth in SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or a complement thereof;

(b) a nucleic acid molecule consisting of the nucleotide sequence set forth in SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or the complement thereof;

(c) a nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence set forth in SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, SEQ ID NO:20, SEQ ID NO:22, or SEQ ID NO:24;

(d) a nucleic acid molecule which encodes a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence set forth in SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, SEQ ID NO:20, SEQ ID NO:22, or SEQ ID NO:24, wherein the nucleic acid molecule hybridizes to the complement of a nucleic acid molecule consisting of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23 in 6X SSC at 45°C, followed by one or more washes in 0.2X SSC, 0.1% SDS at 50-65°C;

(e) a nucleic acid molecule comprising a nucleotide sequence which has at least 50% identity with the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or the complement thereof;

(f) a nucleic acid molecule comprising a nucleotide sequence of at least 15 nucleotides of the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or the complement thereof; and

(g) a nucleic acid molecule which hybridizes to a complement of the nucleic acid molecule of any one of subparts (a) to (f) under stringent conditions.

REMARKS

Claims 1-38 were pending the application. Claims 18-35 have been canceled, without prejudice, as being directed to a non-elected invention, and claim 39 has been added. Accordingly, upon entry of this amendment, claims 1-17 and 36-39 will be pending. For the Examiner's convenience, the pending claims are set forth in Appendix A.

Support for new claim 39 may be found, at least, in the specification and claims as originally filed.

No new matter has been added. Any amendments to and/or cancellation of the claims should in no way be construed as an acquiescence to any of the Examiner's rejections and was done solely to more particularly point out and distinctly claim the subject matter of Applicants' invention in order to expedite the prosecution of the application. Applicants reserves the right to pursue the claims as originally filed in this or a separate application(s).

Election/Restriction

The Examiner has required restriction to one of the following inventions under 35 U.S.C. §121:

Group I: Claims 1-4 and 9-16, drawn to an isolated nucleic acid molecule (1-4 and 9), classified in class 536, subclass 23.1; a vector (claims 10 and 11), classified in class 435, subclass 320.1; and host cells (claims 12-16), classified in class 435, subclass 252.3;

Group II: Claim 5, drawn to an isolated nucleic acid molecule which encodes a naturally occurring allelic variant, classified in class 536, subclass 23.1;

Group III: Claim 6, drawn to an isolated nucleic acid molecule comprising a nucleotide sequence which has at least 50% identity with the nucleotide sequence of claim 1, classified in class 536, subclass 23.1;

Group IV: Claim 7, drawn to an isolated nucleic acid molecule comprising a fragment of at least 15 nucleotides of the nucleotide sequence of claim 1, classified in class 536, subclass 23.1;

Group V: Claim 8, drawn to an isolated nucleic acid molecule which hybridizes to the nucleic acid molecule [of claim 1], classified in class 536, subclass 23.1;

Group VI: Claims 17 and 25-34, drawn to a method of producing a polypeptide (claim 17), classified in class 435, subclass 69.1; and a method for producing a fine chemical (claims 25-34), classified in class 435, subclass 3;

Group VII: Claim 18, 19, and 22, drawn to an isolated SES polypeptide, classified in class 530, subclass 350;

Group VIII: Claims 20, drawn to an isolated polypeptide, classified in class 530, subclass 350;

Group IX: Claim 21, drawn to an isolated polypeptide comprising a naturally occurring alleleic variant of polypeptide, classified in 530, subclass 350;

Group X: Claims 23 and 24, drawn to an isolated polypeptide, classified in 530, subclass 350;

Group XI: Claim 35, drawn to a method for diagnosing the presence or activity of *corynebacterium diptheriae* in a subject, classified in class 436, subclass 94;

Group XII: Claim 36, drawn to a host cell, classified in class 435, subclass 320.1; and

Group XIII: Claims 37 and 38, drawn to a host cell, classified in class 435, subclass 320.1.

Applicants thank the Examiner for the telephonic interview of October 29, 2002 with Elizabeth Hanley, Attorney for Applicants. During the telephonic interview, the Examiner agreed to reconsider the Grouping of the claims in the instant Restriction Requirement upon submission of Applicants' arguments regarding traversal of the instant Restriction Requirement, as set forth in detail below.

Applicants hereby elect Group I (claims 1-4 and 9-16), *with traverse*, under 35 U.S.C. §121 for prosecution in the present application. Applicants respectfully submit that Groups I-V, Group XII, Group XIII, and at least claim 17 of Group VI, should be re-grouped together into a single Group containing claims 1-17 and 36-38 ("new Group I").

Furthermore, Applicants respectfully submit that Groups VII-X should be re-grouped into a single Group containing claims 18-24 ("new Group II").

With respect to Applicants' proposed new Group I, Applicants' grounds for traversal are set forth below.

Applicants respectfully submit that independent claims 1-4 (Group I) are directed to isolated nucleic acid molecules and polypeptides encoded by the same isolated nucleic acid molecules. Claim 5 (Group II) is directed to isolated nucleic acid molecules which encode naturally occurring allelic variants of the same nucleotide sequences claimed in claims 1-4. Claim 6 (Group III) is directed to isolated nucleic acid molecules comprising a nucleotide sequence with a specific percent identity to the same nucleotide sequences claimed in claimed 1-4. Claim 7 (Group IV) is directed to isolated nucleic acid molecules comprising fragments of the same nucleotide sequence claimed in claims 1-4. Claim 8 (Group V) is directed to isolated nucleic acid molecules which hybridize to the same nucleic acid molecules of claims 1-7. Claims 36 (Group XII) and claims 37 and 38 (Group XIII) are directed to a host cell comprising the same nucleotide sequences as claims 1-4.

Furthermore, Applicants respectfully submit that I-V, XII and XIII should further be re-grouped to include the claim 17 of Group VI. Claim 17 (Group VI) is directed to a method of producing a polypeptide comprising culturing a host cell transformed with an expression vector comprising the nucleotide sequences of claim 1. The method of Group VI recites use of the nucleic acids of Groups I-V. That is, the method of claim 17 is limited to the use of the nucleic acids of Groups I-V (which should be combined into one Group). Accordingly, claim 17 should be re-grouped into the new Group I containing Groups I-V, XII and XIII.

The Examiner states that

> [i]nventions I, II, III, IV, V, XII, and XIII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP §806.04, MPEP §808.01). In the instant case, these inventions are directed to different products which have different modes of operation, different functions, or different effects because they are directed to different nucleotide sequences or host cells comprising different nucleic acid molecules.

Applicants respectfully submit that the isolated nucleic acid molecules, vectors, and host cells of Groups I-V, XII and XIII, and the claimed methods of making a polypeptide of claim 17, are related. There is a disclosed relationship between the claimed inventions of Groups I-V, XII, XIII, and the methods of claim 17.

The nucleic acid molecule of claims 1-4, 5, 6, 7, and 8 (Groups I-V) are clearly all related as they are all portions of or variants of the same nucleotide sequences, e.g., SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:2, or polypeptides encoded by the these nucleotide sequences, e.g., SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, SEQ ID NO:20, SEQ ID NO:22, or SEQ ID NO:24.

As set forth in MPEP §803,

> [t]here are two criteria for a proper requirement for restriction between patentably distinct inventions:
> (A) The inventions must be independent (see MPEP §802.01, §806.04, §808.01) or distinct as claimed (see MPEP §806.05-§806.05(I)); and
> (B) There must be a serious burden on the examiner is the restriction is required (see MPEP §803.02, §806.04(a)-§806.04(I), §808.01(a), and §808.02)."

Since claims 1-17 and 36-38 encompass the same isolated nucleic acid molecules and products, a search of the isolated nucleic acids of Groups I-V, XII and XIII and the method of claim 17 would be co-extensive and would not involve a serious burden on the Examiner. For example, the results of a search of the full-length nucleotide sequence of SEQ ID NO:1 would clearly encompass the results of a search of a nucleotide sequence with a particular percent identity to SEQ ID NO:1 or a fragment of SEQ ID NO:1. Furthermore, Groups I-V are included in the same class and subclass.

Moreover, Applicants respectfully submit that the U.S. Patent and Trademark Office has routinely grouped claims directed to nucleotide sequences, variants of the same nucleotide sequences, and fragments of the same nucleotide sequences together in a single Group. Furthermore, the U.S. Patent and Trademark Office has routinely grouped

claims directed to host cells which comprise specific nucleotide sequences together in a single Group with claims directed to the same nucleotide sequences. For Example, in a restriction requirement issued on January 29, 2002, in co-pending U.S. Application Serial No. 09/602,740, which has pending claims which were similar the claims of the instant application, the Examiner restricted the claims to the following Groups:

SuperGroup A:	Claims 1-17 and 36-38, drawn to nucleic acid molecules, vectors, host cells, and methods of making a polypeptide, classified in class 435, subclass 183.
SuperGroup B:	Claims 18-24, drawn to polypeptides, classified in class 435, subclass 183.
SuperGroup C:	Claims 25-34, drawn to methods of making fine chemicals, classified in class 435, subclass 41.
SuperGroup D:	Claim 35, drawn to methods for diagnosing the presence or activity of DNA sequences of *C. diptheriae,* classified in class 435, subclass 6.
SuperGroup E:	Claim 35, drawn to methods for diagnosing the presence or activity of protein sequences of *C. diptheriae,* classified in class 435, subclass 7.1.

Accordingly, based on the statements set fourth above, Applicants respectfully request that the Examiner re-group Groups I-V, XII and XIII and claim 17 of Group VI together into a single Group (new Group I).

Sequence Election Requirement

In the instant Restriction Requirement, the Examiner states that

> the polypeptide products in Groups I, II, III, IV, VI, VIII, IX, X, XI, XII, and XIII reads on patentably distinct SEQ ID Numbers. Each sequence is patentably distinct because the sequences are structurally unrelated sequence, and a further restriction is applied to each Group. Although the polynucleotides and polypeptides are related as the claimed polynucleotide is asserted to encode the claimed polypeptide, they are distinct inventions because they are physically and functionally distinct chemical entities, and the protein product can be made by another and materially different

> process, such as by synthetic peptide synthesis or purification from the natural source. Further, the nucleic acid may be used for processes other than the production of the protein as evidenced by the methods of at least group VI. Therefore, applicant must further elect a single SEQ ID NO. (See MPEP §803.04). Applicant is advised that examination will be restricted to only elected SEQ ID NO. and should not to be construed as a species election.

Applicants hereby elect SEQ ID NO:1, *with traverse*. Applicants respectfully submit that the Examiner seems to be basing the sequence election requirement on the statement that the polynucleotides of the instant invention are distinct from the polypeptides of the invention, and that the polypeptides can be made by other methods than by being encoded by the respective polynucleotide sequences. Because each claim is directed to either a polynucleotide sequence or a polypeptide sequence, Applicants assume the sequence election requirement is based on the Examiner's statement that "each sequence is patentably distinct", rather than the assertion that the polypeptides are distinct from the polynucleotides. Applicants respectfully request clarification.

Applicants respectfully submit that the policy set forth in 1192 O.G. 68 (Nov. 19, 1996), clearly provides that a reasonable number of sequences are allowed to be claimed in a single application. It has been determined that "normally ten sequences constitute a reasonable number for examination purposes" and, thus, up to ten independent and distinct sequences are often examined in a single application without restriction. M.P.E.P. §804.4 and 1192 O.G. 68 (Nov. 19, 1996). In the interest of saving considerable time and cost to Applicants and the United States Patent and Trademark Office, and in accordance with 1192 O.G. 68 (Nov. 19, 1996), Applicants respectfully request that at least 10 sequences be examined in the instant application.

Furthermore, it is the Applicants' position that, with respect to the claimed nucleotide sequences, a species election for searching purposes would be more appropriate in this situation.

Applicants respectfully submit that a sufficient search and examination with respect to the claimed nucleotide sequences can be made without serious burden on the Examiner. As the M.P.E.P. states:

> [i]f the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions. M.P.E.P. § 803.

Applicants respectfully submit that the searches with regard to each SEQ ID NO. would be co-extensive and would not involve a serious burden on the Examiner. Applicants therefore request that the Examiner re-characterize the restriction requirement with respect to the SEQ ID NOs. as a species election requirement.

It is the Applicants' understanding that under 35 U.S.C. §121, an election of a single species for prosecution on the merits is required, to which the claims will be restricted if no generic claim is finally held allowable. Applicants submits that claim 1 is generic. Applicants further understand that upon the allowance of a generic claim, Applicants will be entitled to consideration of claims to additional species which are written in dependent from or otherwise include all the limitations of an allowed generic claims as provided by 37 C.F.R. §1.41 *et seq.*

Accordingly, within Group I, Applicants hereby further elect the species of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23 for search purposes only. Applicants even further elect the species of SEQ ID NO:1 for search purposes only.

Applicants reserve the right to traverse the above restriction with respect to non-elected Groups II-XIII in this or subsequent applications.

SUMMARY

If a telephone conversation with Applicants' Attorney would expedite the prosecution of the above-identified application, the examiner is urged to call the undersigned at (617) 227-7400.

Respectfully submitted,

Lisa M. DiRocco

Lisa M. DiRocco, Esq.
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Dated: **November 15, 2002**

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claims 18-35 have been canceled, without prejudice and claim 39 has been added as follows:

39. **(New)** An isolated nucleic acid molecule selected from the group consisting of:

(a) a nucleic acid molecule comprising the nucleotide sequence set forth in SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or a complement thereof;

(b) a nucleic acid molecule consisting of the nucleotide sequence set forth in SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or the complement thereof;

(c) a nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence set forth in SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, SEQ ID NO:20, SEQ ID NO:22, or SEQ ID NO:24;

(d) a nucleic acid molecule which encodes a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence set forth in SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, SEQ ID NO:20, SEQ ID NO:22, or SEQ ID NO:24, wherein the nucleic acid molecule hybridizes to the complement of a nucleic acid molecule consisting of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23 in 6X SSC at 45°C, followed by one or more washes in 0.2X SSC, 0.1% SDS at 50-65°C;

(e) a nucleic acid molecule comprising a nucleotide sequence which has at least 50% identity with the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID

NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or the complement thereof;

(f) a nucleic acid molecule comprising a nucleotide sequence of at least 15 nucleotides of the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or the complement thereof; and

(g) a nucleic acid molecule which hybridizes to a complement of the nucleic acid molecule of any one of subparts (a) to (f) under stringent conditions.

APPENDIX A

1. An isolated nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or a complement thereof.

2. The isolated nucleic acid molecule of claim 1, wherein said nucleic acid molecule encodes an SES polypeptide involved in the production of a fine chemical.

3. An isolated *Corynebacterium glutamicum* nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or the complement thereof.

4. An isolated nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, SEQ ID NO:20, SEQ ID NO:22, or SEQ ID NO:24.

5. An isolated nucleic acid molecule which encodes a naturally occurring allelic variant of a *Corynebacterium glutamicum* polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, SEQ ID NO:20, SEQ ID NO:22, or SEQ ID NO:24, wherein the nucleic acid molecule hybridizes to the complement of a nucleic acid molecule consisting of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23 in 6X SSC at 45°C, followed by one or more washes in 0.2X SSC, 0.1% SDS at 50-65°C.

6. An isolated nucleic acid molecule comprising a nucleotide sequence which has at least 50% identity with the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or the complement thereof.

7. An isolated nucleic acid molecule comprising a fragment of at least 15 nucleotides of the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or the complement thereof.

8. An isolated nucleic acid molecule which hybridizes to the nucleic acid molecule of any one of claims 1-7 under stringent conditions.

9. An isolated nucleic acid molecule comprising the nucleic acid molecule of claim 1 or a portion thereof and a nucleotide sequence encoding a heterologous polypeptide.

10. A vector comprising the nucleic acid molecule of claim 1.

11. The vector of claim 10, which is an expression vector.

12. A host cell transfected with the expression vector of claim 11.

13. The host cell of claim 12, wherein said cell is a microorganism.

14. The host cell of claim 13, wherein said cell belongs to the genus *Corynebacterium* or *Brevibacterium.*

15. The host cell of claim 12, wherein the expression of said nucleic acid molecule results in the modulation in production of a fine chemical from said cell.

16. The host cell of claim 15, wherein said fine chemical is selected from the group consisting of: organic acids, proteinogenic and nonproteinogenic amino acids, purine and pyrimidine bases, nucleosides, nucleotides, lipids, saturated and unsaturated fatty acids, diols, carbohydrates, aromatic compounds, vitamins, cofactors, polyketides, and enzymes.

17. A method of producing a polypeptide comprising culturing the host cell of claim 12 in an appropriate culture medium to, thereby, produce the polypeptide.

36. A host cell comprising the nucleic acid molecule of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or the complement thereof, wherein the nucleic acid molecule is disrupted.

37. A host cell comprising the nucleic acid molecule of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or the complement thereof, wherein the nucleic acid molecule comprises one or more nucleic acid modifications.

38. A host cell comprising the nucleic acid molecule of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or the complement thereof, wherein the regulatory region of the nucleic acid molecule is modified relative to the wild-type regulatory region of the molecule.

39. An isolated nucleic acid molecule selected from the group consisting of:

(a) a nucleic acid molecule comprising the nucleotide sequence set forth in SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID

NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or a complement thereof;

(b) a nucleic acid molecule consisting of the nucleotide sequence set forth in SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or the complement thereof;

(c) a nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence set forth in SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, SEQ ID NO:20, SEQ ID NO:22, or SEQ ID NO:24;

(d) a nucleic acid molecule which encodes a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence set forth in SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, SEQ ID NO:20, SEQ ID NO:22, or SEQ ID NO:24, wherein the nucleic acid molecule hybridizes to the complement of a nucleic acid molecule consisting of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23 in 6X SSC at 45°C, followed by one or more washes in 0.2X SSC, 0.1% SDS at 50-65°C;

(e) a nucleic acid molecule comprising a nucleotide sequence which has at least 50% identity with the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or the complement thereof;

(f) a nucleic acid molecule comprising a nucleotide sequence of at least 15 nucleotides of the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19, SEQ ID NO:21, or SEQ ID NO:23, or the complement thereof; and

(g) a nucleic acid molecule which hybridizes to a complement of the nucleic acid molecule of any one of subparts (a) to (f) under stringent conditions.